

United States Department of the Interior

OFFICE OF THE SECRETARY Washington, D.C. 20240

MEMORANDUM

To:

Secretary

DEC - 3 2006

From:

Mark Limbaugh

Secretary's Designee, Glen Canyon Adaptive Management Program

Subject:

Report and Recommendations from the Glen Canyon Dam Adaptive

Management Program Federal Advisory Committee

The Glen Canyon Dam Adaptive Management Work Group (AMWG) convened by conference call on September 6, 2006, to discuss actions taken to meet responsibilities under the Federal Advisory Committee Act (FACA), the Grand Canyon Protection Act, and the Glen Canyon Dam Environmental Impact Statement Record of Decision. The primary purpose of the conference call was to receive recommendations to the Secretary of the Interior on Fiscal Year 2007 Glen Canyon Dam Releases and the Adaptive Management Program Budget and Work Plan. As your designee and chairman of the AMWG, and in accordance with the Group's charter under the FACA, the following recommendations are hereby formally transmitted:

Fiscal Year 2007 Hydrograph, Program Budget and Work Plan

The AMWG recommends to the Secretary of the Interior the Fiscal Year 2007 hydrograph, budget, and work plan as recommended by the Technical Work Group (TWG) with the following change: the hydrograph chart/table is modified by adding: "Note: Monthly volumes are subject to change in accordance with the final Annual Operating Plan for Colorado River Reservoirs 2007."

The motion passed by the following vote: Yes = 19; No = 1; Abstain = 1.

The referenced hydrograph and budget are provided as attachments to this memorandum. Because of its large size, the work plan is not attached but can be viewed electronically at the Upper Colorado Region Bureau of Reclamation web site. The link to this document is as follows: http://www.usbr.gov/uc/rm/amp/amwg/mtgs/06sep06CC/index.html.

The next AMWG meeting is scheduled for December 5-6, 2006, in Phoenix, Arizona. Agenda items will likely include the finalization of planning documents, including the Strategic Science Plan, the Monitoring and Research Plan, and the Long Term Experimental Plan; updates on ongoing research and monitoring; preparation of the FY 2008-2009 biennial budget and work plan, review of final FY 2006 budget expenditures; report from the Humpback Chub Recovery Consultation (HCBRC) Ad Hoc Group; Executive Summary of Grand Canyon Monitoring and Research Center completed science projects/reports, and a presentation on the Colorado River Storage Project Basin Fund (how rates are set and power is purchased) by Western Area Power Administration. I will forward any recommendations that arise from that meeting.

Attachments

cc list on next page.

cc: Deputy Secretary

Acting Assistant Secretary, Fish and Wildlife & Parks Acting Assistant Secretary, Bureau of Indian Affairs Commissioner, Bureau of Reclamation Director, National Park Service Director, Fish and Wildlife Service Deputy Director, U.S. Geological Survey

Assistant Director, Wildlife Management, Arizona Game and Fish Department, 2221 W. Greenway Road, Phoenix, Arizona 85023

Attention: Bruce Taubert

Bureau of Indian Affairs, PO Box 10, Phoenix, Arizona 85001

Attention: Ms. Amy L. Heuslein

Department of Energy-WAPA, Western Area Power Administration, 150 E. Social Hall Avenue, Salt Lake City, Utah 84111

Attention: Brad Warren

The Hualapai Tribe, PO Box 179, Peach Springs, Arizona 86434 Attention: Ms. Loretta Jackson Kelly

Director, Cultural Preservation Office, The Hopi Tribe, PO Box 123, Kykotsmovi, Arizona 86039

Attention: Leigh Kuwanwisiwma

National Park Service, Grand Canyon National Park, PO Box 129, Grand Canyon, Arizona 86023

Attention: Joe Alston

Navajo Nation, Navajo Nation Inn Office Complex, PO Box 4950,

Window Rock, Arizona 86515

Attention: Steven Begay

Pueblo of Zuni, PO Box 339, Zuni New Mexico, 87327

Attention: Carleton Albert, Sr.

San Juan Southern Paiute Tribe, PO Box 2656, Tuba City, Arizona 86045

Southern Paiute Indian Consortium, Kaibab Paiute Indian Reservation, Tribal Affairs Bldg., HC 65 Box 2, Pipe Springs, Arizona 86022

Attention: Mr. Charley Bulletts

State Supervisor, U.S. Fish and Wildlife Service, Arizona Ecological Services Office, 2321 W. Royal Palm Road, Suite 103, Phoenix, Arizona 85021

Attention: Sam Spiller

Arizona Department of Water Resources, Office of Colorado River Management, 500 N. Third Street, Phoenix, Arizona 85004

Attention: Bill Werner

cc list continued on next page.

cc: Executive Director, Colorado River Board of California, 770 Fairmont Avenue,

Suite 100, Glendale, California 91203

Attention: Gerald Zimmerman

Colorado Water Conservation Board, 1313 Sherman Street, Room 718,

Denver, Colorado 80203 Attention: Rod Kuharich

Colorado River Commission of Nevada, 555 E. Washington Avenue, Suite 3100,

Las Vegas, Nevada 89101 Attention: Phillip Lehr

New Mexico Interstate Stream Commission, PO Box 25102, Santa Fe, New Mexico 87504

Attention: Jay C. Groseclose

Interstate Streams Engineer, Herschler Building, 4-E, 122 W. 25th Street,

Cheyenne, Wyoming 82002 Attention: John W. Shields

Director, Division of Water Resources, PO Box 146201, Salt Lake City, Utah 84114

Attention: Dennis Strong

Grand Canyon Wildlands Council, 7 Teypana Drive, Tijeras, New Mexico 87059

Attention: Mr. Max Oelschlaeger

President, Grand Canyon Trust, 2601 North Fort Valley Road, Flagstaff, Arizona 86001

Attention: Nikolai Ramsey

Federation of Fly Fishers, Northern Arizona Flycasters, 11475 Homestead Lane,

Flagstaff, Arizona 86004 Attention: Mark Steffen

Grand Canyon River Guides, PO Box 1934, Flagstaff, Arizona 86002

Attention: Andre Potochnik

Colorado River Energy Distributors Association, 4625 S. Wendler Drive, Suite 111,

Tempe, Arizona 85282 Attention: Ms. Leslie James

Utah Associated Municipal Power Systems, 2825 E. Cottonwood Parkway,

Suite 200, Salt Lake City, Utah 84121

Attention: Ted Rampton

Deputy Regional Director, Upper Colorado Region, U.S. Bureau of Reclamation,

125 S. State Street, Salt Lake City, Utah 84138

Attention: Darryl Beckmann

Regional Director, Upper Colorado Region, U.S. Bureau of Reclamation,

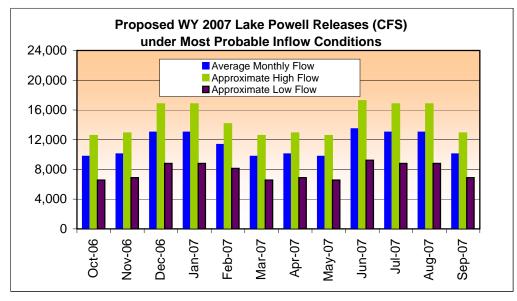
125 S. State Street, Salt Lake City, Utah 84138

Attention: Dennis Kubly (w/budget att to each)

WBR:J.Hower:cjackson:11/16/2006:202-513-0667:06035692 H:/Correspondence/UC Region/ Report and Recommendations AMWG 11.16.06

Glen Canyon Proposed WY 2007 Releases - August 17, 2006

	Monthly Release KAF		Average Release CFS	Approx Daily High CFS	Approx Daily Low CFS	Maximum Daily Range CFS
October-06	600	31	9758	12558	6558	6000
November-06	600	30	10083	12883	6883	6000
December-06	800	31	13011	16811	8811	8000
January-07	800	31	13011	16811	8811	8000
February-07	630	28	11344	14144	8144	6000
March-07	600	31	9758	12558	6558	6000
April-07	600	30	10083	12883	6883	6000
May-07	600	31	9758	12558	6558	6000
June-07	800	30	13444	17244	9244	8000
July-07	800	31	13011	16811	8811	8000
August-07	800	31	13011	16811	8811	8000
September-07	600	30	10083	12883	6883	6000

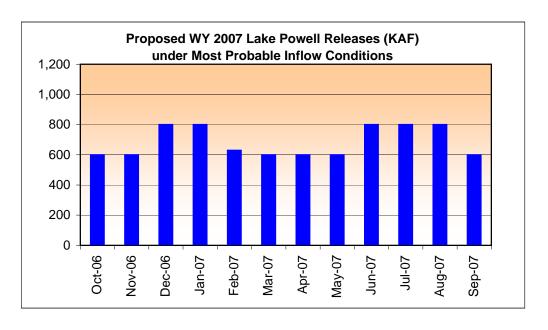


Tom Ryan 8/17/2006

Total

8230

Note: Monthly volumes are subject to change in accordance with the final Annual Operating Plan for Colorado River Reservoirs 2007.



for the

Glen Canyon Dam Adaptive Management Program October 3, 2006

(Recommended by the AMWG September 6, 2006)

		<u> </u>		_	
A B	С	D	E	F	G H I I J K L M N O
1	ID	Bureau of Reclamation Project Descriptions	BOR Approved FY06 Budget (inc. CPI increase)	BOR Proposed FY07 Budget	Comments
2	Recla	mation Administration Power Revenue Funded Projects			
3	Α	Adaptive Management Work Group			
4	1	Personnel Costs	159,418	154,628	
5	2	AMWG Member Travel Reimbursement	15,725	16,197	
3	3	Reclamation Travel	13,000	13,390	
7	4	Facilitation Contract	25,000	25,000	
3	5	POAHG Expenses	19,000	51,500	
	6	Other	7,175	7,390	
)	Reclar	nation AMWG Subtotal	239,318	268,105	
ī	В	Technical Work Group			
2	1	Personnel Costs	72,847	70,657	
3	2	TWG Member Travel Reimbursement	20,836	22,211	
4	3	Reclamation Travel	15,898	16,375	
5	4	TWG Chair Reimbursement	22,171	22,836	
6	5	Other	2,050	2,112	
7	Reclar	nation TWG Subtotal	133,802	134,190	
8	С	Other			
9	1	Compliance Documents	22,450	263,622	Additional funds required for experimental plan compliance
20	2	Administrative Support for NPS Permitting(1)	100,000	110,000	This administrative cost formerly appeared in the science budget. BAHG resolved on 5/31/05 that this admin cost be moved to above the science line. Increase \$71 SPG Conference Call 7/18/06 realign from SAV and Economic Analysis
1	3	Contract Administration	24,394	32,413	
2	4	Experimental Carryover Funds - to be held by BOR	424,675	500,000	\$500K experimental funds created by savings from GCMRC budget in FY07. Per agmt. between BOR & GCMRC, BOR will hold the carryover funds for potential fuexperimental actions.
23	5	Integrated Tribal Resources Monitoring	125,000	132,500	To be held by BOR until FY06 contractual conditions are met. Includes \$7.5K of 6% burden on \$125K.
4	6	USFWS HBC Genetics Mgmt Plan	50,000	•	
5 6	Other	Subtotal	746,519	1,038,535	
6	Reclar	mation Administrative Subtotal	997,639	1,440,830	
	Progra	ammatic Agreement Cultural Resources			
	1	Reclamation Administration	54,107	71,892	
₫	2	NPS Support for Archaeological Site Assessment	-	67,500	
1	3	NN & GLCA Treatment Plan and Implementation	20,000	-	
<u>)</u>) <u>)</u>	4	Canyon Treatment Plan and Implementation	250,000	145,000	
<u>1</u> 1 5		ommatic Agreement Subtotal	322,788	284,392	
	Recla	mation Power Revenue Program Subtotal	1,320,426	1,725,222	
1	Pools	mation Administration NON-Power Revenue Funded Proj	note		
		Development of a LCR Management Plan	T T		
∄		Consultation	· ·		
2	Δ	Agreements with Tribes			
0	1	Hopi Tribe	95,000	95,000	
1	2	Hualapai Tribe	95,000	95,000	
2	3	Navajo Nation	95,000	95,000	
17 18 19 10 11 12 13	4	Pueblo of Zuni	95,000	95,000	
4	5	Southern Paiute	95,000	95,000	
5	6	DOI Handling Fee	2,375	-	No handling fee for FY07
16	Tribal	Consultation Subtotal	477,375	475,000	~
17		mation NON-Power Revenue Subtotal	477,375	475,000	
44 45 46 47 45 49			411,373	773,000	
49	BURE	AU OF RECLAMATION TOTAL AMP PROGRAM COSTS:	1,797,801	2,200,222	

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	Α	В	C	D	Е	F	G	Н		J	K	L	M	N	0
50							-	•			1	•			
51	GCMRC Project ID	Status	Category	Grand Canyon Monitoring and Research Center Project Descriptions	GCMRC FY06 Budget (inc. CPI Increase)	GCMRC Proposed FY07 Budget - Gross (inc. Burden)	GCMRC DOI Customer Burden (Combined 6 and/or 17%)	GCMRC Project Subtotal (w/o Burden)	GCMRC Salaries (Note 4)	GCMRC Project Related Travel / Training	GCMRC Operations / Supplies	GCMRC Equipment Purchase / Replacement	GCMRC AMP Logistics Support	Outside GCMRC & Contract Science Labor (17% Burden)	GCMRC Coop & Inter Agency Agmts (6% Burden)
52 l	U.S. Geological	Surve	ey - Bio	ological Resource Division - GCMRC - Power Revenue Fur	nded Projects										
53	.		,	•											
54 (GOAL 1 - FOOD B	ASE													
55	BIO 1.R1.07		R&D	Aquatic Food Base (FY07FY09)	403,898	489.917	50.877	439.040	108.040	2,000	3.000	_	110,000	_	216,000
56	BIO 1.R3.07	N		Diet, Drift and Predation Data Analysis (FY07)	100,000	68,829	3.896	64,933	100,010	2,000		-	- 110,000	_	64,933
57	510 11110101		Nab	SUB-TOTAL GOAL 1:	403.898	558.746	54,773	503.973	108.040	2.000	3.000	_	110.000		280.933
	GOAL 2 - NATIVE	EIGH	EC	SOB-TOTAL GOAL 1:	403,030	330,740	34,773	303,373	100,040	2,000	3,000		110,000		200,933
	BIO 2.R1.07			LOD LIDO Manifesian Lauran Affice (LIDO Description For Co. 1)		200 122	00.010	004.040	40 700				04.000		044.500
59 60	BIO 2.R1.07 BIO 2.R2.07	0		LCR HBC Monitoring Lower 15km (HBC Population Est; Ongoing)	-	388,128	26,818	361,310	12,720	-	-	-	34,000		314,590
61	BIO 2.R2.07 BIO 2.R3.07	0		LCR HBC Monitoring Lower 1,200m; Ongoing) HBC Monitoring Above Chute Falls; Ongoing)	53.550	37,312	2,942 5,997	34,370 67,507	2,700	-		-	8,000 15,000	-	26,370
62	BIO 2.R3.07	0				73,504				- 4.000		-		-	49,807
63				Monitoring Mainstem Fishes (includes Diamond Down; Ongoing)	917,844	388,452	32,917	355,535	23,320	1,000	1,000	-	80,000	-	250,215
64	BIO 2.R5.07	O N		Nonnative Control Planning (FY07FY10)	=	95,144	13,824	81,320	81,320	-	-			-	
04	BIO 2.R6.07	N	K&D	Nonnative Control Pilot Testing (FY07FY10)	-	114,338	12,149	102,189	14,690	1,000	1,014	8,000	30,000	-	47,485
65	BIO 2.R7.07	0		Stock Assessment of Native Fish in Grand Canyon (FY07Ongoing)	-	35,360	5,138	30,222	30,222	-	-	-	-	-	-
66	BIO 2.R8.07	0		Abundance Estimation Procedures (FY07Ongoing)	-	35,360	5,138	30,222	30,222	-	-	-	-	-	
67	BIO 2.R9.07	0		Bioenergetics Modeling (FY07FY10)	-	35,359	5,138	30,221	30,221	-	-	-	-	-	
68	BIO 2.R10.07	N		HBC PEP Preparation (FY07 08; conduct PEP in FY08) (Note 5)		-							<u> </u>		<u> </u>
69	BIO 2.R11.07	N		Native Fishes Habitat Data Analysis (FY07FY10)	-	32,884	4,778	28,106	23,106	5,000	-	-	-	-	-
70	BIO 2.R12.07	N		Trammel Net Effects (FY07FY09)	-	37,789	2,139	35,650	-	-	-	-	-	-	35,650
71	BIO 2.R13.07	N		Remote PIT Tag Reading (FY07FY09)	-	61,536	4,106	57,430	-	-	-	-	6,000		51,430
72	BIO 2.R14.07	N		Test Sonic Tags (FY07FY09)	-	78,434	7,914	70,520	8,480	-	-	20,000	5,000	-	37,040
73	BIO 2.R15.07	N	R&D	Test DIDSON Camera (FY07FY09)	-	13,151	1,911	11,240	4,240	2,000	5,000	-	-	-	-
74	NA	0	R&D	Diamond Creek Downstream Monitoring (See Monitoring Mainstem Fishes; BIO 2.R4.07)	81,000	-	-	-	-	-	-	-	-	-	-
75	NA	С		Warm Water Fish Monitoring Workshop (and Start-up Costs)	69,600	-	-	-	-	-	-	-	-	-	-
76	NA	С		Monitoring Parasites and Diseases	23,400	-	-	-	-	-	-	-	-	-	_
77	NA	С		Spawning Redds and Suppression Mechanisms	170,732	-		-	-	-	-	-	-	-	
78	NA	С	EXP	Mechanical Removal of Nonnative Fish	795,192	-	-	-	-	-	-	-	-	-	
79				SUB-TOTAL GOAL 2:	2,111,318	1,426,751	130,909	1,295,842	261,241	9,000	7,014	28,000	178,000	-	812,587
80 (GOAL 3 - EXTIRP	ATED	SPECII	ES								•		-	
81	07.3.00			None Identified	_1	_					_				Т.
82	JJ.00		14/7	SUB-TOTAL GOAL 3:	-			-			-	-		1	
	GOAL 4 - RAINBO	W TO	OUT	SOB-TOTAL GOAL S.											
					450	100		445							140
84	BIO 4.M1.07	0		Status & Trends of Lees Ferry Trout (Ongoing)	156,492	122,768	7,468	115,300	-	-	-	-	5,000	-	110,300
85	BIO 4.E1.07	0	EXP	Evaluate Effects of Exp Flows on Rainbow Trout (FY07; Note 1)		48,029	2,719	45,310	-	-	-	-	-	-	45,310
86				SUB-TOTAL GOAL 4:	156,492	170,797	10,187	160,610	-	-			5,000		155,610
87	GOAL 5 - KANAB														
88	BIO 5.R1.07	0	R&D	Monitor Kanab Ambersnail (FY95FY10)	88,832	32,727	3,286	29,441	3,817	-	-	-	10,000	-	15,624
89				SUB-TOTAL GOAL 5:	88,832	32,727	3,286	29,441	3,817	-	-	-	10,000	-	15,624

for the

Glen Canyon Dam Adaptive Management Program October 3, 2006

(Recommended by the AMWG September 6, 2006)

П	A	В	С		F	F	G	Н	-		ĸ		М	N	0
51	GCMRC Project ID	Status	Category	Grand Canyon Monitoring and Research Center Project Descriptions	GCMRC FY06 Budget (inc. CPI Increase)	GCMRC Proposed FY07 Budget - Gross (inc. Burden)		GCMRC Project Subtotal (w/o Burden)	GCMRC Salaries (Note 4)	GCMRC Project Related Travel / Training	GCMRC Operations / Supplies	GCMRC Equipment Purchase / Replacement	GCMRC AMP Logistics Support	Outside GCMRC & Contract Science Labor (17% Burden)	GCMRC Coop & Inter Agency Agmts (6% Burden)
60			_	ological Resource Division - GCMRC - Power Revenue Fur	nded Projects										
	GOAL 6 - SPRING														
91	BIO 6.R1.07	0	R&D	Vegetation Mapping (FY07FY10)	16,632	112,496	16,346	96,150	72,150	3,000	1,000	-	20,000	-	-
92	BIO 6.R2.07			Vegetation Transects (FY07FY10)	-	95,501	8,301	87,200	7,400	250	250	-	20,000	-	59,300
93	BIO 6.R3.07	0	R&D	Vegetation Synthesis (FY07FY10)	-	66,502	7,782	58,720	31,720	2,500	4,500	-	-	-	20,000
94				SUB-TOTAL GOAL 6:	16,632	274,499	32,429	242,070	111,270	5,750	5,750	-	40,000		79,300
95	GOAL 7 - QUALITY	Y-OF-	WATE												
96	BIO 7.R1.07	О	R&D	Water Quality Monitoring Lake - Powell & Tailwaters (Budget presented below; FY07FY09)	=	-	-	-	-	-	=	-	-	-	-
97	PHY 7.M1.07	N	СМ	Integrated Quality-of-Water Monitoring (Downstream of GCD; FY07 Ongoing)	859,947	879,852	127,842	752,010	175,854	16,000	30,000	10,000	50,000	470,156	-
98	PHY 7.R1.07	N	R&D	Modeling Support Linked with Integrated Quality-of-Water Monitoring (FY07FY08)	-	76,465	11,110	65,355	-	-	-	-	-	65,355	-
99	NA.	С	R&D	Fine-Grained Sediment Storage Monitoring Project (FIST) (Note 8)	271.625	-		-	-	-	-	-		-	-
100				SUB-TOTAL GOAL 7:	1,131,572	956,317	138,952	817,365	175,854	16,000	30.000	10.000	50.000	535,511	-
101	GOAL 8 - SEDIME	NT			, , , ,		,	,,,,,,	.,,,,	.,					
102	PHY 8.M1.07	N	СМ	See REC 9.R1.07 (SEDS-PEP Review in FY06 w/ Core Monitoring Planning & Development in FY07, New Project in FY08)	-	-	-	-	-	-	-	-	-	-	-
103				SUB-TOTAL GOAL 8:	_			_	_					_	
104	GOAL 9 - RECREA	ATION	IAL EX												
105	REC 9.R1.07	0	R&D	Sand Bar and Campable Area Monitoring (FY07FY11)	86,287	130,208	10.458	119.750	5,750	1,500	2,500		15.000	5.000	90,000
106	REC 9.R2.07	N		Evaluate Campable Area Monitoring Results Using Measured Field Data vs. Remotely Sensed Data (FY07)		47,031	2,714	44,317	-	-	500	-	-	-	43,817
107	REC 9.R3.07	N	R&D	Compile Campsite Inventory and GIS Atlas (FY07FY08)	_	64.445	7.425	57.020	16,400	2,500	2,500	_	15.000	_	20.620
108			Nub	SUB-TOTAL GOAL 9:	86.287	241.684	20.597	221.087	22,150	4.000	5,500		30.000	5.000	
	GOAL 10 - HYDRO	POW	/ER	OOD-TOTAL OOAL 3.	00,207	241,004	20,001	221,007	22,100	4,000	3,300		30,000	3,000	104,407
110	HYD 10.M1.07	N	СМ	Monitor Power Generation and Market Values under Current and Future Dam Operations (FY07Ongoing)	-	18,135	2,635	15,500	15,000	-	500	-	-	-	_
111		_	-	SUB-TOTAL GOAL 10:	-	18,135	2,635	15,500	15,000	- 1	500	-	-	-	-
112	GOAL 11 - CULTU	RAL							-,					-	_
113	CUL 11.R1.07	0	R&D	Research & Development toward Core Monitoring (FY07; Note 10)		316,418	37.093	279.325	-	3,000	16,000	48,000	50,000	67.850	94,475
114	CUL 11.R2.07	Ň		Implement Tribal Monitoring Projects (See funding in BOR section)	-		-		-			- 10,000	-		
115	NA NA	c	CM	Integrated Tribal Resource Monitoring	29,250		-	-	-	-	-	-	-	-	-
116	NA NA	č	CM	Integrated Archaeolgoical Site Monitoring (Note 10)	374,201	-	-	-	-	-	-		-	-	-
117				SUB-TOTAL GOAL 11:	403,451	316,418	37,093	279,325	-	3,000	16,000	48,000	50,000	67,850	94,475

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Glen Canyon Dam Adaptive Management Program October 3, 2006

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	A	В	С	D	I E	F	G	Н	I I	J	K	L	М	N	0
51	GCMRC Project ID	Status	Category	Grand Canyon Monitoring and Research Center Project Descriptions	GCMRC FY06 Budget (inc. CPI Increase)	GCMRC Proposed FY07 Budget - Gross (inc. Burden)	GCMRC DOI Customer Burden (Combined 6 and/or 17%)	GCMRC Project Subtotal (w/o Burden)	GCMRC Salaries (Note 4)	GCMRC Project Related Travel / Training	GCMRC Operations / Supplies	GCMRC Equipment Purchase / Replacement	GCMRC AMP Logistics Support	Outside GCMRC & Contract Science Labor (17% Burden)	GCMRC Coop & Inter Agency Agmts (6% Burden)
				ological Resource Division - GCMRC - Power Revenue Fu	nded Projects										
118	GOAL 12 - HIGH Q	UALI	TY MO	NITORING, RESEARCH & AEAM											
119	DASA 12.D1.07	0	DASA	Preparation for Monitoring Data Acquisition (Remote Sensing; FY07- Ongoing)	32,877	148,400	8,400	140,000	-	-	-	-	-	-	140,000
120	DASA 12.D2.07	О	DASA	Grand Canyon Integrated Oracle Dagtabase Management System (FY0 -Ongoing; Note 7)	157,105	171,445	24,911	146,534	122,034	2,000	2,500	-	-	20,000	-
121	DASA 12.D3.07	0	DASA	Library Operations (FY07Ongoing)	168,005	48,745	7,083	41,662	31,962	3,000	6,700	-	-	-	-
122	DASA 12.D4.07	0	DASA	Legacy Analog Data Conversion (Analog to Digital - Reports & Imagery) (FY07FY11)	-	104,463	15,178	89,285	58,585	-	30,700	-	-	-	-
123	DASA 12.D5.07	0	DASA	GIS Support for Integrated Analyses and Projects, GIS Lead (FY07 Ongoing; Note 7)	186,017	231,704	29,277	202,427	123,542	4,000	28,200	-	-	-	46,685
124	DASA 12.D6.07		DASA	Integrated Analysis and Modeling - Mapping Shoreline Habitat Changes (FY0708)	-	84,199	4,766	79,433	-	-	-	-	-	-	79,433
125	NA	С	DASA	Channel Mapping	32,877		-	-				-	-	-	-
126			,	Sub-total Goal 12 DASA Portion.	576,881	788,956	89,615	699,341	336, 123	9,000	68,100	-	-	20,000	266,118
127	SUP 12.S1.07	0		Logistics Base Costs (Other costs dispersed throughout projects; Ongoing)	122,616	135,252	19,652	115,600	80,600	-	-	35,000	-	-	-
128	SUP 12.S2.07	0		Survey Operations (Ongoing)	118,572	112,082	16,285	95,797	50,797	5,000	5,000	20,000	15,000	-	-
129	SUP 12.S3.07	0	SUP	Control Network (Ongoing)	138,270	126,496	16,499	109,997	63,997	3,000			23,000	-	20,000
130				Sub-total Goal 12 Support Portion.	379,458	373,831	52,437	321,394	195,394	8,000	5,000	55,000	38,000	-	20,000
131	PLAN 12.P1.07	N		Enhancing the Conceptual Ecosystem Model to Identify Critical Ecosystem Interactions and Data Gap (Science Advisor's conduct work in FY07; Funding in Independent Reviews, ADM 12.A4.07; FY07FY08)	-	-	-	-	-	-	-	-	-	-	-
132	PLAN 12.P2.07	N	R&D	AMP Effectiveness Workshop (FY07)	-	46,800	6,800	40,000	-	25,000	5,000	-	-	10,000	-
133				Sub-total Goal 12 Planning Portion.	-	46,800	6,800	40,000	-	25,000	5,000	-	-	10,000	-
134	ADM 12.A1.07			Administrative Operations (Ongoing)	772,545	790,942	114,923	676,019	144,769	16,750	514,500	-	-	-	-
135	ADM 12.A2.07	0		Program Planning & Management (Ongoing) AMWG/TWG Participation (Ongoing)	566,444 17,550	908,802 17.550	132,048	776,754	716,504	40,250	20,000	-	-	-	-
136	ADM 12.A3.07	0	ADM	1	17,550 380,250	17,550 275.514	2,550 39.101	15,000	94.540	15,000	1 000	-	-	107.000	9,900
137	ADM 12.A4.07 ADM 12.A5.07	0		GCMRC Component of SBSC Sys Admin Support (FY05-Ongoing; Note		320,438	46,559	236,413 273,879	31,513	7,000 4,000	1,000 70,000	100,000	-	187,000 99,879	
139	ADM 12.E1.07	0	EXP	Projected FY07 Carry Forward for Experiment Phase II (GCMRC budgeted and created an experimental fund of \$500K in FY07 to carryover for future experimental activities. Funds moved to BOR section F22. FY07 - Ongoing)	-	-					·				
140	NA	0		GCMRC Science Symposium (FY97-Ongoing)	29,250	-	-	-	-	-	-	-	-	-	-
141	NA	С		GCMRC's Additional Strategic Planning Support (FY06)	29,250	-	-	-	-	-	-	-	-	-	-
142	NA	С		AMWG/TWG Requests (Ongoing-FY06)	87,750	-	-	-	-	-	-	-	-	-	-
143	NA	С	ADM	Unsolicted Proposals / Other research activities (Ongoing-FY05)	-	-	-	-	-	-	-	-	-	-	-
144				Sub-total Goal 12 Administrative/Management Portion	2,237,549	2,313,247	335, 182	1,978,065	892,786	83,000	605,500	100,000	-	286,879	9,900
145				SUB-TOTAL GOAL 12		3,522,834	484,034	3,038,800	1,424,303	125,000	683,600	155,000	38,000	316,879	296,018
146			GCM	RC Power Revenue Subtotal Projected for FY2007	7,592,370	7,518,907	914,894	6,604,013	2,121,675	164,750	751,364	241,000	511,000	925,240	1,888,984

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for the

Glen Canyon Dam Adaptive Management Program

October 3, 2006

(Recommended by the AMWG September 6, 2006)

	Α	В	С	D	E	F	G	Н	I	J	K	L	М	N	0
51	GCMRC Project ID	Status	Category	Grand Canyon Monitoring and Research Center Project Descriptions	Increase)	GCMRC Proposed FY07 Budget - Gross (inc. Burden)	GCMRC DOI Customer Burden (Combined 6 and/or 17%)	GCMRC Project Subtotal (w/o Burden)	GCMRC Salaries (Note 4)	GCMRC Project Related Travel / Training	GCMRC Operations / Supplies	GCMRC Equipment Purchase / Replacement	GCMRC AMP Logistics Support	Outside GCMRC & Contract Science Labor (17% Burden)	GCMRC Coop & Inter Agency Agmts (6% Burden)
52	U.S. Geological	Survey	/ - Bio	logical Resource Division - GCMRC - Power Revenue Fu	nded Projects										
147															
148	BIO 7.R1.07			eological Survey - Biological Resource Division - GCMR Water Quality Monitoring - Lake Powell & Tailwaters (FY07-09)	C - NON-Powe 215,250	r Revenue Fund 226,659	ed Projects 32,933	193,726	147,498	10,506	16,013	5,000	14,709	_	Τ -
150	BIO TBD			Glen Canyon Dam TCD Experimental Studies (Note 9)	170,000	200,000	-	-	- 147,430	- 10,300	-	- 3,000	14,705	-	-
151			GCM	C Other Agreement Funded Project Subtotal	385,250	426,659	32,933	193,726	147,498	10,506	16,013	5,000	14,709		-
152				ALLAMB EVOCAT DI ANNIED DECORAM COCTO	7 077 000	7.045.500	0.47.007	0.707.700	0.000.470	475.050	707.077	040.000	505 700	005.040	4 000 004
153	(CMRC	: 101	AL AMP FY2007 PLANNED PROGRAM COSTS:	7,977,620	7,945,566	947,827	6,797,739	2,269,173	175,256	767,377	246,000	525,709	925,240	1,888,984
155															
156				BOR & USGS-GCMRC AMP PROGRAM COSTS	FISCAL YEAR 2006	FISCAL YEAR 2007									
157			BOR	Power Revenue Program Costs	1,320,426	1,725,222									
158			GCMF	C Power Revenue Program Costs (gross)	7,592,370	7,518,907									
159			Subto	tal BOR & GCMRC Power Revenue Program Costs	8,912,796	9,244,129	i								
160			BOR I	Ion-Power Revenue Program Costs	477,375	475,000									
161			GCMF	C Non-Power Revenue Program Costs	385,250	426,659									
162		-		tal BOR & GCMRC Non-Power Revenue Program Costs	862,625	901,659	i								
163			Estima	ted Cost Share expense required by USGS policy	1,000,000	1,000,000	U								
164		Ī	тота	L AMP PROGRAM COSTS (BOR & GCMRC):	10,775,421	11,145,789									
165		-			-		•								
166			FUND	ING:	FY 2006	FY 2007	•								
167			USBR	& USGS Power Revenues under cap	8,974,884	9,244,131	Note: FY06 increase	d at 4.6% CPI; Oth	ner years' costs esti	mated increases @	3% CPI per histo	oric average.			
168			FY06	Carry Over	-	-									
169			USGS	Appropriations	1,095,000	1,095,000	Note: Tribal Particip	ation and \$1M dolla	ars of Burden/Cost	Share Assistance F	unding				
170			USBR	Appropriations	295,000	295,000	Note: Tribal Particip	ation and Environm	nental Research Ag	reement (TCD) Fur	nding				
171			NPS /	ppropriations	95,000	95,000	Note: Tribal Particip	ation Funding							
172			FWS.	Appropriations	95,000	95,000	Note: Tribal Particip	ation Funding							
173			BIA A	ppropriations	95,000	95,000	Note: Tribal Particip	ation Funding							
174			BOR	Operations & Maintenance (IQWP)	215,250	226,659									
175			TOTA	L AVAILABLE FUNDS	10,865,134	11,145,790									
176			TOTA	L FUNDING NEEDED	10,775,421	11,145,789									
177			тота	L AVAILABLE FUNDS - ESTIMATED COSTS	89,713	1									

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for the

Glen Canyon Dam Adaptive Management Program October 3, 2006

(Recommended by the AMWG September 6, 2006)

	А	В	С	D		E	F	G	Н	I	J	K	L	M	N	0
51	GCMRC Project ID	Status	Category	2000.ip.io.io		GCMRC FY06 Budget (inc. CP Increase)	GCMRC Proposed FY07 Budget - Gross (inc. Burden)	GCMRC DOI Customer Burden (Combined 6 and/or 17%)	GCMRC Project Subtotal (w/o Burden)	GCMRC Salaries (Note 4)	GCMRC Project Related Travel / Training	GCMRC Operations / Supplies	GCMRC Equipment Purchase / Replacement	GCMRC AMP Logistics Support	Outside GCMRC & Contract Science Labor (17% Burden)	GCMRC Coo & Inter Agend Agmts (6 Burden)
	U.S. Geological	Surve	y - Bi	ological Resource Division - GCMRC - Power Revenu	e Fur	nded Projects										
78	NOTES to SPI	DEAD	CUE	= T												
79 80	NOTES to SFI	LAD	JOHE	=1												
-	Notes of change	s mad	le to s	preadsheet from SPG meetings held July 5-7 and Jul	v 18	2006										
21	ū			luating Effects of Exp Flows on Rainbow Trout (FY07) funded by red	•		Aguatic Vegetation S	tudy by half from \$96	.034 to \$48.000							
33				ed Aquatic Vegetation Study (\$48,000 gross) and the Economic An		٠				of \$194.200.						
84				following items would be funded: LCR gage \$30,000 net (\$35,100		•			,		R in F23):					
85				on trout at Lees Ferry, \$20,000 net (\$23,400 gross, added to Line 1	-		-	=		-						
86				interagency agreement, F20). Additional note to file - the gross am			-		-	-		ve Operations, Lir	ne 134.			
37	Note 3: Removed B	OR po	rtion of	budget "Tribal River Trips for Consultation" which had been combine	d with	current section "A	greements with Tribe	s".								
8																
-	Notes of change	s mad	le to s	preadsheet after TWG meeting held August 2-3, 2006												
90	Note 4: Column "I",	This co	olumn h	eading and entries were changed to include only GCMRC salaries.	Other I	USGS salaries we	re added to column "	N", Outside GCMRC	& Contract Science	Labor.						
91	Note 5: Line 68; BI	O 2.R10	0.07, HE	BC PEP Preparation funding (appx. \$14,000) was redirected to the L	ittle Co	lorado River Hum	pback Chub Monitori	ng of the Lower 15km	(Line 59; BIO 2.R1	.07) after discussion	on between USFWS	S and the GCMRC	Program Manag	er.		
2	USFWS HBC wor	k under	funded;	PEP planning preparation will be subsumed under other FY07 plan	ning ta	sks.										
3	Note 6: FY08 Estir	nated B	ludget o	olumn removed per USBR request in discussion between USBR an	d GCM	RC on 8/12/06.										
94	Note 7: Moved \$5	0,000 ne	et in equ	sipment costs from L120 and \$50,000 net in equipment costs from L	123 an	d combined these	costs in L138. In FY	06 the equipment pur	chase was listed he	ere and moving the	budget to					
5	DASA created a	lifficult s	situation	within SBSC and it was decided to restore the funding to the IT sup	port lin	e for FY07. The	purchase plan, mana	gement and oversight	of the equipment r	ests with GCMRC	as it always has.					
96																
7	Notes of change	s and	clarifi	cations made to spreadsheet after AMWG approval,	confe	rence call me	eting held Septe	mber 6, 2006								
98 l	Note 8: Line 99, C	olumn E	Add	ed line to correctly show that the \$271,625 shown in Col. E, as FY06	fundir	ng was for the Fin	e-grained Sediment S	torage Project (FIST)	and not for the nev	v FY07 project ider	ntified as					
9	Modeling Support	Linked	with Int	egrated Quality-of-Water Monitoring (FY07FY08)												
00	Note 9: D150, Cha	inged th	e title o	f the agreement from the previous title: "Enivronmental Resource ar	d Com	pliance" to the titl	e of the new agreeme	ent beginning in FY20	06 "Glen Canyon D	am Temperature C	Control Device (TCE	Experimental S	tudies".			
)1	Note 10: Lines 113,	FY07 F	Project (CUL 11.R1.07, "Research and Development toward Core Monitoring	" contir	nues R&D initiated	in FY06, Line 116, "	ntegrated Archaeolog	ical Site Monitoring) ".						
)2 [[]	Note 11: A "NOTES	" heade	er was ir	serted to help draw attention to the notes section (line 179).												
3	Note 12: Line and o	olumn i	dentifie	s in "Notes" section, above, were updated to address line adjustment	nts to th	ne budget spread:	sheet.									
ا 4	Note 13: Funding a	mounts	were a	dded to "Notes" section, above, to help clarify changes made.												
)5	Note 14: "Notes" we	ere inse	rted in o	hronological order and renumbered to assist with clarification.												
06																
07																
)8	Notes revised on 10/	02/06 b	y Christ	ine Beard, 928-556-7219; cbeard@usgs.gov												

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